



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,198	10/27/2003	Dennis L. Keiser	KEISER.020A	3867
20995	7590	01/31/2006	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP			DRYDEN, MATTHEW DUTTON	
2040 MAIN STREET			ART UNIT	
FOURTEENTH FLOOR			PAPER NUMBER	
IRVINE, CA 92614			3736	

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

6

Office Action Summary	Application No. 10/694,198	Applicant(s) KEISER, DENNIS L.	
	Examiner Matthew D. Dryden	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/2/05, 1/30/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: element 12 is referenced in the specification but is not shown in the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 6 is objected to because of the following informalities: the claim refers back to claim 1, but there is no pneumatic cylinder in claim 1, the claim should refer back to claim 3. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacFarlane et al (6672157). MacFarlane et al discloses the claimed method steps except for specifically recording the resistance element moving at the highest achievable velocity. MacFarlane et al does disclose performing exercise strokes at various increasing resistance levels and measuring velocities and power at each step (see Columns 10-12, lines 40-20) but does not disclose measuring the highest achievable velocity. However MacFarlane does include the maximum power that should include the maximum speed and velocity, so it would have been obvious to determine the highest velocity because that would give the highest obtainable power at that resistance level. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the methods of MacFarlane et al with step that specifically mentioned measuring the highest achievable velocity, because that would give the highest obtainable power at that resistance level.

Regarding claim 2, it would have been obvious to one having ordinary skill in the art to determine a velocity and a resistance level where the maximum power is so that if the user performs another power test there is a known velocity

Art Unit: 3736

and resistance level where the last maximum power was obtained for comparison and analysis, which could provide information for someone who was rehabilitating a specific group of muscles.

Regarding claim 7, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a method step to MacFarlene et al that included determination of sufficient data based on an exercise stroke not being completed because this prevents a valid power calculation to be determined because the distance completed by a full stroke is not the same for the uncompleted stroke.

Regarding claims 8 and 9, MacFarlene et al teaches to stop the exercise stroke once a leg was tested three times, so this could be viewed as a predetermined number of exercise strokes. Also MacFarlene et al teaches to stop at a specific resistance level, so this could be viewed as a predetermined resistance level. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide MacFarlene et al with a method step that included ceasing data collection once either a resistance level was obtained or a predetermined number of exercise strokes were completed, because the user of the system knows his/her own boundaries and how many reps or what resistance level they are comfortable with. Also due to the varying methods of determining sufficient data it is not viewed as a critical part of the current invention or method step.

Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacFarlene et al in view of Stima III (4846466). MacFarlene et al discloses

Art Unit: 3736

the claimed method except for the resistance element being a pneumatic cylinder. Stima, III teaches a resistance element that is a pneumatic cylinder (see Column 4, lines 22-42), which allows for the resistance of the weight-lifting machine to be increased or decreased fairly easily. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of MacFarlene et al to include a pneumatic cylinder system as the resistance element, as taught by Stima, III, to allow for the resistance of the weight-lifting machine to be increased or decreased with relative ease.

Regarding claim 5, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device and method of MacFarlene et al, with a step of allowing the user to rest before attempting a new resistance level, to allow for accurate and valid power testing results to be obtained.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over MacFarlene et al in view of Carlson (4730829). MacFarlene as modified discloses the claimed invention except for the engagement assembly being configured as a chest press, including a resistance element including a respective position transducer. Carlson teaches it is known to provide a measuring system for each side of the body and break/resistance mechanism for each side of the body on a chest press system (see Column 3, lines 24-38, see columns 21-22, lines 45-10, also see Figure 1), because one side of the body maybe stronger than the other side so the maximum power for each side of the body may differ thus requiring the system to measure each side independently. It

Art Unit: 3736

would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of MacFarlene et al with an engagement assembly being configured as a chest press, including a resistance element including a respective position transducer, as taught by Carlson, because one side of the body maybe stronger than the other side so the maximum power for each side of the body may differ thus requiring the system to measure each side independently.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over MacFarlene et al in view of Stima, III as applied to claim 3 above, and further in view of Brock (6231481). MacFarlene et al as modified discloses the claimed invention except for the velocity is determined periodically measuring a position of a piston in a pneumatic cylinder. If the pneumatic cylinder is the means for providing resistance, it can also be read as the weight portion as discussed in Brock. Brock teaches to provide a position transducer on the weight or resistance means to determine the distance traveled and then to calculate the power using the weight or resistance value and the velocity determined from the distance values (see Columns 3-7, lines 15-44). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device and method of MacFarlene et al to include a position sensing means in the piston of a pneumatic cylinder, as taught by Brock, to determine the distance traveled of the resistance providing means and to then calculate the power using the weight or resistance value and the velocity determined from the distance values determined from the position transducer.

Art Unit: 3736

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stima, III in view of Brock. Stima, III discloses the claimed invention except for the position transducer that enables the determination of a representative velocity at which the engagement assembly is moved through the exercise stroke and a power calculation system that calculates the power for each exercise stroke. Stima, III discloses a variable resistance element that is automatically adjustable and can be adjustable to produce a sequence of increasing resistance levels (see Columns 7-9, lines 11-22, also see whole Specification). Also, Stima, III discloses an engagement assembly that is coupled to the resistance element, see Figure 1 around element 100.

Brock teaches a physical activity measuring method and apparatus that includes a position transducer and a power calculation system that determines the maximum power (or peak power) based on the readings of the muscle power tester (see Columns 3-4, lines 20-5). Brock also teaches it is known to provide his power tester to any already known weight lifting machine in order to determine the maximum power produced by a selected group of muscles (see Column 7, lines 6-44). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Stima, III with a position transducer and a power calculation system, as taught by Brock, for the determination of power in a specific group of muscles to monitor progress in a weight training program or for rehabilitation programs.

Art Unit: 3736

Regarding claim 11, Stima, III teaches a resistance element that is a pneumatic cylinder (see Column 4, lines 22-42), which allows for the resistance of the weight-lifting machine to be increased or decreased fairly easily.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stima, III in view of Brock as applied to claim 10 above, and further in view of Carlson (4730829). Stima, III as modified discloses the claimed invention except for the engagement assembly being configured as a chest press, including a resistance element including a respective position transducer. Carlson teaches it is known to provide a measuring system for each side of the body and break/resistance mechanism for each side of the body on a chest press system (see Column 3, lines 24-38, see columns 21-22, lines 45-10, also see Figure 1), because one side of the body maybe stronger than the other side so the maximum power for each side of the body may differ thus requiring the system to measure each side independently. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Stima, III with an engagement assembly being configured as a chest press, including a resistance element including a respective position transducer, as taught by Carlson, because one side of the body maybe stronger than the other side so the maximum power for each side of the body may differ thus requiring the system to measure each side independently.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 3736

U.S. Pat. No. 6,027,429 Daniels discloses a variable resistance exercise device

U.S. Pat. No. 4,601,468 Bond et al disclose an exercise and diagnostic system and method

U.S. Pat. No. 3,848, 467 Flavell discloses a proportioned resistance exercise servo system

U.S. Pat. No. 5,997,440 Hanoun discloses a cervical muscle evaluation apparatus

U.S. Pat. No. 6,270,445 Dean, Jr. et al disclose an in-bed exercise machine and method of use.

Conclusion

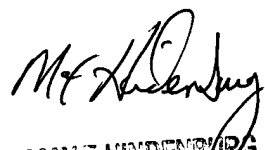
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Dryden whose telephone number is (571) 272-6266. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3736

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MDD



MARK F. HINDENBURG
PATENT EXAMINER
EBC CENTER 3700